

Video Game Addiction And Personality Traits

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Abstract

The relationship between shyness, loneliness, and social anxiety and video game usage was investigated in 205 participants. Results showed that significant relationships were found between shyness and loneliness and excessive video game use. Social anxiety was not correlated with excessive use in this sample. The findings provide support for the idea that shyness and loneliness may be risk factors for problematic video game use.

Keywords: Video Gaming, Addiction, Personality Traits

1. Introduction

Video gaming, introduced only 60 years ago represents a \$20 billion industry in this country (Spagnoli, 2015). While people enjoy gaming for a variety of reasons there are also some major concerns regarding the development of an Internet and gaming addiction. Excessive game playing can result in significant negative life consequences. It is estimated that between 10 -15 % of gamers play excessively and can be characterized as meeting several of the criteria for addiction (Kuss & Griffiths, 2012).

Rehbein and Baier (2013) discovered that ninth graders that played video games over two hours a day exhibited problematic gaming behavior and the use of violent games contributed to their addiction (Rehbein & Baier, 2013). Furthermore, these researchers also found that adolescents who were well integrated into their social peer groups and adolescents that have experienced a higher devotion to their parents and followed stricter parental control were less prone to gaming addiction. In addition, full time college students have been recognized as one of the most vulnerable populations for excessive video gaming (Ebeling-Witte, Frank, & Lester, 2007). This may likely be due to the fact that college students tend to have very flexible schedules, more time to play games and poor time management skills.

Video gaming especially those played on-line fall under the category of the Internet (Starcevic, 2014). These online video games, most appropriately known as Massively Multiplayer Online Role-Playing Games (MMORPG's), have been identified as a particular interest to gamers worldwide (Kuss & Griffiths, 2012). Approximately 46% of gamers engage in this format of game play, making it the most popular genre of video games. Other popular video games include role-playing, real time strategy and first-person shooter (Kuss & Griffiths, 2012).

MMORPG's have become very popular over the last decade because of their ability to connect and play with game players across the globe, which has made this kind of video game playing very enticing (Kuss & Griffiths, 2012). Not only is it appealing based on the worldwide community it presents, but also the fact that it tailors to the wide range of interest of game players through its inclusive nature of genders, races, and diverse player interests. MMORPG's have also been recognized as having an increased likelihood of playing video games in order to help escape from reality and decrease stress (Cole & Hooley, 2013).

Researchers have found links between Internet addiction and various personality traits and characteristics, such as the case for shyness (Chak & Leung, 2004) and introversion (Ebeling-Witte, Frank, & Lester, 2007). Research also indicates that excessive video gamers are significantly more likely than non-excessive video gamers to experience

shyness (Chak & Leung, 2004). Cole and Hooley (2013) discovered that gamers who experience problematic Internet use also experienced social phobia, anxiety, neuroticism and introversion.

The present study further examined the relationship between shyness, loneliness, and social anxiety as they relate to video gaming behavior. Understanding the link between personality traits and risk factors for problematic use is critically important for focusing prevention and treatment efforts. These variables were selected because they were thought to be potential contributors to video game addiction. It was anticipated that participants who were excessive video gamers would be shy, lonely, and experience more social anxiety than those that engaged less excessively.

2. Methodology

2.1 Participants

The survey obtained 302 participants with 205 (139 males, 66 females) participants completing the entire survey packet. Only the data from the 205 participants that completed the entire survey were included in the analysis. The participants ranged in age from 18 to 63, with the mean age being $M = 25.6$ years ($SD = 13.7$). With regard to education, 58% of the participants completed high school, 35 % were currently enrolled in college, and 7% had advanced degrees. Regarding the sexual orientation of participants 84% were heterosexual and the remaining 16% fell into one of the LGBTQ categories. With respect to relationship status 55% of participants reported being single, 34% having a significant other, and the remaining 11% reported being married. In regards to race 83% were Caucasian, 7% were Asian, 6% were Hispanic/Latino, 4% were African American and 1% were American Indian. Employment status of participants ranged from 28% employed full time, 31% employed part time, 18% unemployed, 3% were self-employed, and 19% of the participants were students.

2.2 Materials

The Video Game Addiction Scale (Young, 1999) included 20 items regarding video game usage, platforms for engaging in gaming, how much time the participants played games and how much money spent on gaming. This scale assessed behaviors and tendencies, such as psychological dependence and compulsive use related to video gaming during the last six months.

The Cheek and Buss Shyness Scale (Cheek & Buss, 1981) consisted of 13-items, which measured shyness and sociability, in addition to assessing how characteristic behaviors may be for the individual. An example of one of these items includes “I am often uncomfortable at parties and other social functions.” Participants were required to answer these questions using 1 (very uncharacteristic or untrue) to 5 (very characteristic or true).

The UCLA Loneliness Scale (UCLA Loneliness Scale, 1980) is a 20-item scale, which assesses an individual’s personal feelings of loneliness and isolation. An example of a scale item is “My interests and ideas are not shared by those around me.” Participants answered these questions with C (“I often feel this way”), S (“I sometimes feel this way”), R (“I rarely feel this way”) or N (“I never feel this way”).

The Liebowitz Social Anxiety Scale (Heimberg, Horner, Juster, Safren, Brown, Schneier, & Liebowitz, 1999) is a 24-item social anxiety measure. The purpose of this scale was to test how the individual felt about a particular situation. Here, the participants rated their fear (mild-severe) in addition to their avoidance on a 1-3 point scale. An example from this scale would be “talking to someone in authority.”

The demographics survey consisted of 8 items, which included sex, age, sexual orientation, relationship status, spiritual orientation, race/ethnicity, college class, and employment status.

2.3 Procedure

Data was collected with a convenience sample method using online postings, the Survey -Monkey link, on various sites from October 2013 – August 2014. The survey was posted on gaming forum sites and on the Facebook pages of the authors. When participants started the online survey they were prompted to read and electronically sign the informed consent form. The form stated that the study should take no more than an hour to complete and that the participants’ data would be kept anonymous. In addition, participants were also made aware that they could end the study at any time and their data would not be used. Following the informed consent, participants started to answer the

survey. The surveys were in the following order; Cheek and Buss Shyness Scale, followed by the Liebowitz Social Anxiety Scale, the UCLA Loneliness Scale, and the Video Game Behavior Scale.. Once participants finished the survey, the survey the participants were prompted to read the online debriefing form and were thanked for their participation. Links were provided to sites for resources for problematic gaming.

3. Results

98% of the participants reported owning a computer; with 76 % of them being a laptop computer. 83% of the participants reported that they play video games on their computers while 61% reported playing on their mobile devices (cell phone, Ipod, Zune, etc.). With respect to the number of hours participants play per day the mean for the sample was $M= 2.42$ with 63.4% playing for three hours or less, 24% playing between 2-4 hours, and the remaining 13% playing 7 hours or more a day. 61% of the participants reported that they often found themselves playing for longer periods of time then they had planned. The participants were asked if they thought they played “too much”. Those participants that answered 3.5 or above on a 5-point scale obtained Video Game Addiction Scores significantly higher than those scoring lower ($t=-3.43$; $P<0,001$). The results showed that participants play video games for many reasons: fun (70%), for relaxation (17%), escape (8%), and fantasy (2%) and competition (2%). Participants reported that they are most engage in single player games (55%), online multiplayer (38%) and local multiplayer (7%). Action/adventure, role-playing games and massively multiplayer games were reported as the game genres participants enjoyed the most.

Pearson correlations were conducted to examine the relationships between the Video Gaming Addiction scores and the behavioral measures. The results found that shyness $r(203)=.58$, $p <0.001$ and loneliness $r(203)=.64$, $p <0.001$ were positively correlated with excessive video gaming. A relationship was not found between social anxiety and the video game addiction scores $r(203)=.12$, $p=ns$. Table 1 below shows the correlations of all variables.

Table 1. Correlations of the variables studied in the experiment, which includes the personality traits and the video game addiction score category.

Variables	1	2	3	4
1. Video Addiction	1.00			
2. Loneliness	.64**	1.00		
3. Shyness	.58**	.48**	1.00	
4. Social Anxiety	.12	.35**	.51**	1.00

** $p < .01$

4. Discussion

The findings from the present study support the notion that people are playing video games at rather high rates. These high rates were observed across the various age ranges studied. As found in previous research the participants engage in play for various reasons - ranging from fun and enjoyment to escape. Additionally and as predicted the MMORPG’s were the most prevalent and preferred game type than offline games.

In terms of the personality variables studied we expected to find positive correlations between the three variables studied (shyness, loneliness, and social anxiety) and the participants video game addiction score. This was the case for shyness and loneliness, when the video game addiction score was higher so was the shyness and loneliness score. The correlational findings suggest a relationship between shyness and loneliness and gaming. It is unclear if excessive gaming leads to an increase in shyness and loneness or if shy and lonely individuals tend to gravitate to increased play.

Previous research had suggested that excessive video gamers experienced lower quality interpersonal relationships compared with non-excessive video gamers. Excessive gamers had also experienced significantly higher levels of social anxiety (Lo, Wang & Fang, 2005). A relationship between social anxiety and video gaming addiction was not found, as expected. Perhaps gamers are quite social through their online interaction with players in MMORPG's. Video gaming provides positive social interactions between gamers. In fact, (Cole & Griffiths, 2007) found that 76.2% of male and 74.7% of female players reported making meaningful relationships online with other video gamers. Video gamers had also reported feeling more like themselves when they played online and also reported discussing sensitive and personal experiences with other players. More research into social anxiety and its effects on social interaction and gaming will need further assessment.

Due to the long length of the survey packet, only 205 out of 302 participants who started the survey completed it. Therefore, a complete data set from these packets could not be used in the analysis of this study. A shorter survey packet should be utilized in the future to maximize the number of participants, which would yield a more robust sample.

The best way to deal with a video game addiction is through prevention. Looking for warning signs in an individual is very important. Some key warning signs include; online relationships becoming more important than real life relationships, having cravings to play video games, mood alteration, and withdrawal symptoms (Hagedorn and Young, 2011). Our findings suggest that we need to be aware of video game usage in shy and lonely people, as they may be more prone to the development of an addiction. Some strategies that can be used for video game prevention include; creating alternative activities, creating rules, limitations, and external warnings, substituting gaming with walking, jogging, swimming, yoga, etc., and becoming more involved in clubs and social activities (Dogan, In press, 2014).

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